AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 14, with the following rewritten paragraph:

-- This application claims priority to U.S. Provisional Patent Application No. 60/151,531 entitled "SYSTEM AND METHOD FOR PROVIDING COMPUTER SECURITY" filed August 30, 1999, which is incorporated herein by reference for all purposes._ ,~~and to~~ U.S. Patent Application No. 09/615,697 entitled "SYSTEM AND METHOD FOR COMPUTER SECURITY" filed July 14, 2000, ~~which~~ is incorporated herein by reference for all purposes.--

Please replace the paragraph beginning on page 1, line 10, with the following rewritten paragraph:

--This application is related to co-pending U.S. Patent Application No. 09/651,303 ~~No.~~ ~~_____ (Attorney Docket No. RECOP012~~ entitled EXTENSIBLE INTRUSION DETECTION SYSTEM filed concurrently herewith, which is incorporated herein by reference for all purposes; and co-pending U.S. Patent Application No. 09/651,854 ~~No. _____~~ ~~(Attorney Docket No. RECOP013)~~ entitled SYSTEM AND METHOD FOR USING LOGIN CORRELATIONS TO DETECT INTRUSIONS filed concurrently herewith, which is incorporated herein by reference for all purposes; and co-pending U.S. Patent Application No. 09/651,434 ~~No. _____ (Attorney Docket No. RECOP014)~~ entitled SYSTEM AND METHOD FOR USING SIGNATURES TO DETECT COMPUTER INTRUSIONS filed concurrently herewith, which is incorporated herein by reference for all purposes; and co-pending U.S. Patent Application No. 09/651,304 ~~No. _____ (Attorney Docket No. RECOP015)~~ entitled SYSTEM AND METHOD FOR ANALYZING FILESYSTEMS TO DETECT INTRUSIONS filed concurrently herewith, which is incorporated herein by reference

for all purposes; and co-pending U.S. Patent Application No. 09/651,306 No.———————

(Attorney Docket No. RECOP016) entitled SYSTEM AND METHOD FOR DETECTING

BUFFER OVERFLOW ATTACKS filed concurrently herewith, which is incorporated herein by

reference for all purposes; and co-pending U.S. Patent Application No. 09/654,347 No.

—————————(Attorney Docket No. RECOP017) entitled SYSTEM AND METHOD FOR

USING TIMESTAMPS TO DETECT ATTACKS filed concurrently herewith, which is

incorporated herein by reference for all purposes.--

Please replace the paragraph beginning on page 88, line 1, with the following rewritten

paragraph:

--Figure 6 illustrates a rule-based system and processes used in some embodiments to

detect computer intrusions using a hybrid approach in which both forward chaining and

backward chaining are used. Two categories of rule-based systems are those that use *forward-*

chaining and those that use *backward-chaining*. Systems that use forward-chaining (602) start

with each incoming fact (604) and generate all inferences (606) resulting from the addition of

that fact to the knowledge base (608), thereby producing all conclusions that are supported by the

available facts. Systems that use backwards-chaining (610) start with a goal (614) and search for

facts that support that goal, producing a structure of subgoals (612). Both approaches have the

potential for substantial *over-generation*: computing inferences that are never used (forward-

chaining) or hypothesizing sub-goals for which there is no support (backward-chaining). The

forward- and backward-chaining approaches are analogues of bottom-up and top-down parsing

in compiler technology.--

Please replace the paragraph beginning on page 88, line 11, with the following rewritten

paragraph:

--Because of the complexity of the data, an embodiment of the invention may use a hybrid approach in its analysis engine (616). Incomplete data presents serious difficulties for a backward-chaining. For example, it becomes impossible to falsify (discard) a sub-goal when any of the supporting data is not found. Similarly, for forward-chaining, missing data blocks the formation of needed inferences. The system of the invention uses forward chaining to generate inferences, but limits the length of the chains (620, 622, 624, and 626). The chains are limited to simple combinations that are easily found along a dimension; e.g., a linear sequence of events within a login session, or a sequence of attempted logins from the same host. Inferences that match sub-goals (628) then trigger backwards chaining (620, 622, and 630) from that sub-goal's potential parents into other sub-goals (632). Backward chaining handles combining events that are more separated or of flexible ordering, and for postulating missing events.--